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REMARKS

Reconsideration and allowance of the above-identified application are respectfully requested in view of the foregoing amendments and the following remarks. Claims 1-32 are currently pending.

Applicant and Applicant's Representative would like to thank Examiner Mohandesi for her courtesy and helpfulness during the personal interview on April 10, 2003. The matters discussed during the interview included the drawing objection and the claim rejections under 35 U.S.C. 112, 102, and 103.

The Drawings:

The drawings have been objected to under 37 C.F.R. 1.83(a) because the drawings must show every feature of the invention specified in the claims. The Office Action indicates that the plurality of layers of carbon graphite must be shown or the feature canceled from Claim 11. New FIG. 10 is submitted herewith which illustrates layers. In accordance with the discussion in the interview the new FIG. 10 should be acceptable. The specification has been amended to include the description of FIG. 10.

The Specification:

The disclosure has been objected to because of a typographical error on page 7. The error has been corrected by the foregoing amendment.

Rejections under 35 U.S.C. §112:

Claims 1-4 and 6-32 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite for the reasons set forth in paragraph 3 of the Office Action. Specifically, the Office Action states that the phrases "in multiple dimensions" and "in all dimensions" are indefinite. As discussed during the interview the term "dimension" as used in the present claims means direction. Thus, the phrase "in multiple dimensions" means in 2D or 3D and the phrase "in all dimensions" means in 3D. The three dimensions

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* | in which the plates can move include medial lateral (side to side) motion, vertical (up and down) motion, and transverse (twisting) motion. One of ordinary skill in the art would understand the term "dimension" as used in the present application and in the pending claims to mean "direction."

In addition, the PTO policy on rejections under 35 U.S.C. §112, second paragraph, has been revised since the date of the Office Action. As set forth in MPEP §2173.02 (Rev. 1, Feb. 2003), "some latitude in the manner of expression and aptness of terms should be permitted even though the claim language is not as precise as the examiner might desire. Examiner's are encouraged to suggest claim language to applicants to improve the clarity or precision of the language used, but should not reject claims or insist on their own preferences if other modes of expression selected by applicants satisfy the statutory requirement." *emphasis added.* This revision of PTO policy has been made in view of the Supreme Court's decision in *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushik Co.*, 535 U.S. 722 (2002). For these reasons, the rejection of Claims 1, 8, 20, 22, 26, and 30 under 35 U.S.C. §112, second paragraph, should be withdrawn.

The phrase "are not fixed to one another in any dimension" was also alleged to be indefinite because "the Figures clearly show the first and second rigid plates being fixed to one another." Claims 24, 28, and 32 have been amended to clarify that the plates are "not immovably fixed to one another in any dimension." Thus, as discussed in the interview, the rejection of Claims 24, 28, and 32 under 35 U.S.C. §112, second paragraph, should be withdrawn.

Rejections under 35 U.S.C. §102:

Claims 1, 7, 8, 14, 18, 19, and 20 have been rejected under 35 U.S.C. §102(b) as being anticipated by Beyl. Beyl describes a shoe having a spring set into the sole at the heel of the shoe. In Beyl, an upper plate 2 and a lower plate 3 are connected together in a pivoting manner to allow oscillating movements of the plates in relation to one another. As is clearly shown and described in Beyl, the plates move with respect to one another in a

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single dimension. Beyl describes this one dimensional motion as an oscillating motion of the plates.

Claims 1, 8, and 20 have been amended to clarify that the separation element is an elastomer. It is this elastomer which allows "independent movement of the first and second rigid plates with respect to one another in multiple dimensions" as recited in the claims. Beyl clearly does not teach or suggest an elastomeric separating element which allows independent movement of the first and second rigid plate in multiple dimensions. Accordingly, Claims 1, 8, and 20 and the claims depending therefrom, are allowable over Beyl.

Claims 1, 6-8, 12, 18, 19, and 20 have been rejected under 35 U.S.C. §102(b) as being anticipated by Sabol. Sabol describes a device to be worn beneath footwear providing a cantilevered leaf spring joined to and separated from a platform which flexes during use. The device of Sabol provides relative motion in a single direction or dimension. Specifically, Sabol describes at Column 6, lines 42-47 that "since the cantilevered spring 12 flexes about only one axis with respect to the user, this stops any rocking or any side-to-side motion being transmitted to the footwear 16". Sabol also does not teach or suggest an elastomeric separating element as claimed.

Since Sabol does not teach or suggest an elastomeric separating element and does not allow independent movement of the first and second rigid plates in multiple dimensions, Claims 1, 8, and 20 and the claims depending therefrom, are allowable over Sabol.

Rejections under 35 U.S.C. §103:

Claims 2, 3, 9-13, and 15 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Beyl in view of Schmid.

Schmid has been relied upon in the Office Action for its teaching of the use of graphite fibers in an energy return system. However, Schmid, like Beyl, lacks any teaching or suggestion of two rigid plates separated by an elastomeric separating element

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which allows independent movement of the plates in multiple dimensions. Accordingly, Claims 2, 3, 9-13, and 15 should be allowed.

Claims 4, 5, 16, 17, and 21-32 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Sabol. As discussed above, Sabol does not teach or suggest two plates and an elastomeric separating element disposed therebetween. Accordingly, Claims 4, 5, 16, 17, and 21-32 are allowable over Sabol.

In the event that there are any questions concerning this amendment or the application in general, the Examiner is respectfully urged to telephone the undersigned attorney at (650) 622-2331 so that prosecution may be expedited.

Respectfully submitted,

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APPENDIX OF MARKED UP SPECIFICATION AND CLAIMS

[0029] FIGS. 8A-8C schematically illustrate the energy return system of the present invention throughout the gait cycle; [and]

[0030] FIGS. 9A-9B schematically illustrate medial and lateral movements occurring during the gait cycle;

[0030.1] FIG. 10 illustrates an enlarged cross sectional view of a portion of one of the plates.

[0033] The energy return system 20 is preferably disposed between the outsole 16 and the upper portion 14 and, in the illustrated embodiment of FIG. 1, extends approximately the entire length of the shoe. The energy return system 20 includes upper and lower sole plates 22, 24 preferably made of an elastic material which is defined here as a rigid, high tensile strength material which has a modulus of elasticity of at least 32×10^6 lb/in.². Preferably, the material will also have a light weight property. A suitable material for the plates 22, 24 is a material made of carbon graphite fibers. Graphite has the advantages that it has high tensile strength, a high modulus of elasticity, is light weight, and as discussed below may be easily processed. The graphite plates 22, 24 may comprise a single layer of graphite fibers but preferably includes a plurality of layers 23, shown in FIG. 10. The upper and lower plates 22, 24 are formed generally in accordance with the teaching of U.S. Patent No. 4,858,338 (Schmid), the entire contents of which are hereby incorporated by reference, wherein crossed fibers of a straight graphite strip and an angled graphite strip are used to cradle the first metatarsal head of the foot, provide maximum stiffness to resist torsion in both directions and activate the rocker bottom system, as discussed below. In the particular embodiment illustrated, however, a heel 18 having a greater height is provided. Further, in a preferred embodiment of the present invention, the graphite fibers will extend to the end of the shape of the plates 22, 24 and the fibers will be disposed in three different directions. There are preferably approximately twenty layers 23 of graphite fibers in the

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plates 22, 24 of the present invention, each layer providing increased shock absorption and energy release along the path of the gait cycle, as described in greater detail below.

Claims

1. (Twice Amended) An article of footwear comprising:
an upper;
an outsole defining a ground engaging surface;
a sole disposed between said upper and said outsole, said sole including an energy return system;
wherein said energy return system comprises a first rigid plate, a second rigid plate spaced a predetermined distance from said first rigid plate, and at least one elastomeric separating element disposed therebetween to maintain the spacing between said plates, the separating element allowing independent movement of the first and second rigid plates with respect to one another in multiple dimensions including medial lateral movement and vertical movement.

5. (Twice Amended) An article of footwear comprising:
an upper;
an outsole defining a ground engaging surface;
a sole disposed between said upper and said outsole, said sole including an energy return system;
wherein said energy return system comprises a first rigid plate, a second rigid plate spaced a predetermined distance from said first rigid plate, and two elastomeric separating elements disposed therebetween to maintain the spacing between said plates, a first one of said separating elements being disposed in a toe area of said article of footwear and a second one of said separating elements being disposed in a heel area of said article of footwear.

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8. (Twice Amended) An energy return system for use in a shoe sole, said system comprising:

a first rigid plate;

a second rigid plate spaced a predetermined distance from said first rigid

plate;

at least one elastomeric separating element maintaining the distance between said first and second rigid plates, the separating element allowing independent movement of the first and second rigid plates with respect to one another in multiple dimensions including medial lateral movement and vertical movement.

20. (Twice Amended) A shoe sole for an article of footwear comprising:

an outsole defining a ground engaging surface;

an upper rigid plate spaced from the outsole for attachment to an upper;

a lower rigid plate disposed between the outsole and the upper rigid plate;

and

at least one elastomeric separating element disposed between the upper and lower rigid plates to maintain the separation thereof, the separating element allowing independent movement of the first and second rigid plates with respect to one another in multiple dimensions including medial lateral movement and vertical movement.

24. (Amended) The article of footwear of claim 1 wherein the first and second rigid plates are not immovably fixed to one another in any dimension.

28. (Amended) The energy return system of claim 25 wherein the first and second rigid plates are not immovably fixed to one another in any dimension.

32. (Amended) The shoe sole of claim 29 wherein the first and second rigid plates are not immovably fixed to one another in any dimension.

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